Innokentiy Vassily Semushin

Nationality:	Russian	Citizenship:	Russia
Address:	Ulyanovsk State University	Tel:	+7 902 355 2320
	School of Mathematics and IT	Fax:	+7 842 241 2997
	42 Leo Tolstoy Street	E-mail:	innokentiyvsem@gmail.com
	Ulyanovsk 432000, Russia	URL:	http://staff.ulsu.ru/semushin

1 List of Publications

1.1 Books & Chapters of Books

1. I. V. Semushin (Ch.1 & Ch.2), J. V. Tsyganova (Ch.3), M. V. Kulikova (Ch.4), O. A. Fat'yanova (Ch.5), and A. E. Kondrat'ev (Ch.5). *Adaptive Systems of Filtering, Control, and Fault Detection.* Collective monograph. Ed. By Prof. I. V. Semushin. Ulyanovsk: USU Publishers, 2011. – 298 p. – ISBN 978-5-88866-399-8. [in Russian]

2. N. G. Yarushkina, I. V. Semushin, et al. *Applied Inteligence Systems Based on Soft Computing.* Collective monograph. Ulyanovsk: USTU Publishers, 2005. – 138 p. – ISBN 5-89146-780-1. [in Russian]

3. I. V. Semushin, *Adaptive Identification and Fault Detection Methods in Random Signal Processing.* Saratov: Saratov University Publishers, 1985. – 180 p. [in Russian]

1.2 Textbooks and Study Guides

1. I. V. Semushin, *Writing and Presentation of a Research Work—Essential Skills for Degree-Seeking Students.* Electronic study guide (Self help) / Materials developer and layout designer I. V. Semushin. // Ulyanovsk: USTU,2013.—1070 slides (260 frames). [in Russian] Free download from http://venec.ulstu.ru/lib/ USTU Electronic Library.

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11. I. V. Semushin and Ju. V. Tsyganova, *Stochastic Models and Estimation.* Lab Experiments in Optimal Control Theory: Manual for colleges // Ulyanovsk: USTU Publishers, 2001. – 42 p. [in Russian] Free download from http://venec.ulstu.ru/lib/2001/4_Semushin_smo.pdf USTU Electronic Library.

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1. Innokentiy V. Semushin and Julia V. Tsyganova, Adaptation in Stochastic Dynamic SystemsSurvey and New Results IV: Seeking Minimum of API in Parameters of Data // *Int. J. Communications, Network, and System Sciences*, 2013, 6, pp. 513–518. Published Online December 2013 (http://www.scirp.org/journal/ijcns) http://dx.doi.org/10.4236/ijcns.2013.612055.

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3. I. V. Semushin, Yu. M. Krolivetskaya, and E. S. Petrova, Kalman filter oriented mathematical model of the steady-circle path for target motion analysis // *Automation of Control Processes*, 2013, 4(34), pp. 14–20.

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6. I. V. Semushin, Yu. V. Tsyganova, and K. V. Zakharov, Robust Filter Algorithms for Ship Navigation and Conning Systems // *Automation of Control Processes*, No. **1(27)**, 2012, pp. 37–46. [in Russian]

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11. N. G. Yarushkina, I. V. Semushin, A. Yu. Nurullin, and N. N. Yastrebova, Structure of the Component-based System for Assessing the Economic State of an Enterprise // *Applied Informatics*, No. **2(20)**, 2009, pp. 18–24. [in Russian]

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13. M. W. Sobolewski and I. V. Semushin, Intergrid Service-oriented Computing Environment to Support Products and Processes // *Information Technology and Computing Systems*, Institute for System Analysis, Russian Academy of Sciences, No. **2**, 2006, pp. 22–44. [in Russian]

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The grand total = 219 publications
including:

- monographs = 3
- text-books or manuals = 27
- journal papers with independent (external) reviewing = 63
- journal papers with local (internal) reviewing = 15
- papers in conference proceedings with independent (external) reviewing = 62
- patents = 5
- research–technical reports = 8
- conference short abstracts (or summaries) = 36

Date: January 20, 2014 Signature: